

AMATEUR APPROACH TO SATELLITE WEATHER INFORMATION

Доп. – Сулим В., ИМ-43

By now thousands of artificial satellites have been put in near-earth orbit to serve scientific programs, communication, military etc. and to give information about the current state of our planet. Special systems of satellites launched by different countries obtain and process data about the weather conditions all over the earth surface and transmit it to ground weather-stations where it is used to create forecasts.

National Aeronautics and Space Administration (NASA) has been developed polar-orbiting satellites for the United States scientific agency – National Oceanic and Atmospheric Administration (NOAA). NOAA provides National Environmental Satellite, Data, and Information Service which was created to operate this group of satellites serving National Weather Service. The group includes satellites of series NOAA which provide Automatic Picture Transmission (APT).

APT consists of image data and the signal from NOAA's satellites can be received with inexpensive equipment on very high frequencies (VHF) by radio-amateurs. Special receiver and antenna can be ordered or made by hand. In 2002 Russian magazine "Radio" published an article about a high-quality USW FM receiver developed by Austrian radio-amateurs. Through few changes it can be relatively simply assembled and used to receive a coded signal from NOAA's satellites. With the help of PC and special software including the satellite tracking systems the signal can be decoded and transformed to a picture.

THE ENTREPRENEURIAL SPIRIT

Доп. – Токар Ю.С.

1. Personal independence, unlimited profit potential, the opportunity to work at something that they really love and at